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ABSTRACT

Search of the Library Information Collection (SLIC) is a relatively inexpensive program for searching the ERIC files. The concepts of the inverted file used by the SLIC programs has reduced the overhead required in previous systems thereby decreasing operating costs and loss of valuable research time. The amount of main storage required is small. The system is written in BAL for an IBM 360/370. The programs are self-relocatable and require 32K of main storage. The major part of this manual is concerned with program operations and setup. There is a description of each program and its required input for the person responsible for the data base. All messages issued by the program are listed with the appropriate response for each. (Author/SJ)

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SLIC

Search of the Library Information Collection

During the past few years, written data has increased far beyond any reasonable consumption level. What complicates this problem even more is trying to wade through this data for research reasons. This often results in a lot of wasted time and money. The federal government has made an attempt to allieviate this problem in the educational field. By developing the ERIC files, the government has eliminated the loss of time and money in such research. The government made available a method of searching the ERIC files which was quicker than doing it by hand but the computer costs were prohibitive. This restricted the availability of this data to the larger data processing centers. We feel that education can only best be served by the computer if these costs are reduced to a reasonable level.

SLIC has made this reduction of costs a reality. It has made the computer a valuable research tool in the field of education. The concepts of the inverted file used by the SLIC programs has reduced the overhead required in previous systems thereby decreasing operating costs and loss of valuable research time.

The amount of main storage required by the SLIC program is small which makes searching of the ERIC data a reality for the small computer user. The system is written completely in BAL for an IBM 360/370. The programs are self-relocatable and they require 32k of main storage. The machine and software requirements of the SLIC system are:

1 IBM 360/370 Model 25 or up
2 2311 or 2314 disk drives or their equivalents
1 1403 line printer

2 2400 series tape drives and up
1 card reader and punch
1 system console
DOS release 25 or up
DOS IBM Sort/Merge program (Tape and Disk)
32k partition
1 ERIC data base

Since all programs are self-relocating, a great deal of flexibility is given to the data center as far as job scheduling is concerned. If the user is running with a non-MPS supervisor, the SLIC package can be run with changes to only the phase cards. The time accounting functions of the package are available only if the CPU has a timer.

The remainder of this manual is concerned with program operations and setup. There is a description of each program and its required input for the person responsible for the data base. All messages issued by the program are listed with the appropriate response for each. We hope that the SLIC package can fulfill your needs and requirements to your satisfaction.

Description of Logic Operations

In order to utilize SLIC in your installation, a description of the logic functions available must be presented. There are three functions available to the user, they are the OR(/), the AND(+), and the ANDNOT(+–,) functions. To define these functions, let's assume we have three lists of words labeled A, B, and C as shown in figure 1.

A	B	C
COLLEGE	CHILD	MILITARY
UNIVERSITY	EDUCATION	COSTS
EDUCATION	LITERATURE	CHILD
COSTS	SCHOOLS	DISCIPLINE
MILITARY		EDUCATION
ACADEMIC		

Figure 1. Word lists.

If you were interested in the function A/B (A OR B), all words in list A and B would give you the desired result. This is shown in figure 2.

A/B
COLLEGE
UNIVERSITY
EDUCATION
COSTS
MILITARY
ACADEMIC
CHILD
LITERATURE
SCHOOLS

Figure 2. The result of the A/B function.

As you can see, there are no duplicates in the result even though some words are contained in both list A and list B. The result contains all the words on both lists.

Now, to illustrate the AND function, suppose you are interested only in A+B(A AND B). The result of this function is shown in figure 3.

A+B
EDUCATION

Figure 3. The result of A+B.

As is apparent, the result contains only the word which appears in both lists A and B.

Finally, suppose you are interested in the function A+–,B (A ANDNOT B). This means that you want all the words which appear in list A and not in list B. Figure 4 shows the result of this operation.

A+–,B
COLLEGE
UNIVERSITY
COSTS
MILITARY
ACADEMIC

Figure 4. The result of A+–,B.

Now, suppose you are interested in the function A/B+–,C (A or B ANDNOT C). This means you want all the words which appear in lists A and B but none which appear in list C. Figure 5 shows the result of this function.

A/B+–,C
COLLEGE
UNIVERSITY
ACADEMIC
LITERATURE
SCHOOLS

Figure 5. The result of the function A/B+–,C.

Due to the nature of the inverted files, the OR function is done first, resulting in the unique list for each set of keywords ORed together. Then the AND and the ANDNOT functions are executed as they appear in the request.

INITIAL MASTER FILE CREATION

There are four steps to the creation of the SLIC master files.

1. Primary Pickoff
2. Sort
3. Chain Builder
4. Master Index and Inverted Files Creation

Each step will be explained, and each program is described in this section.

1. PRIMARY PICKOFF

This routine extracts the descriptors and/or the identifiers from the ERIC master tapes. Each tape is assigned a tape number, and all output is to a separate file. Multiple files may reside on a single tape. The tape number assigned to the ERIC master tape is used ultimately in the select program. The user has the choice in this program of whether to reference the ERIC tapes by the accession number or by the record number in the block. Either option may be chosen. The accession number option requires more storage in the Master Inverted File when it is created, but it allows the search program to produce an accession number listing of all hits in a search. The record number option requires less room for storage, but you lose the accession number print option of the search program.

2. SORT

The sort program takes the picked off descriptors and/or the identifiers and puts them in alphabetical sequence by tape number. This sort is necessary to obtain the correct input to the chain builder.

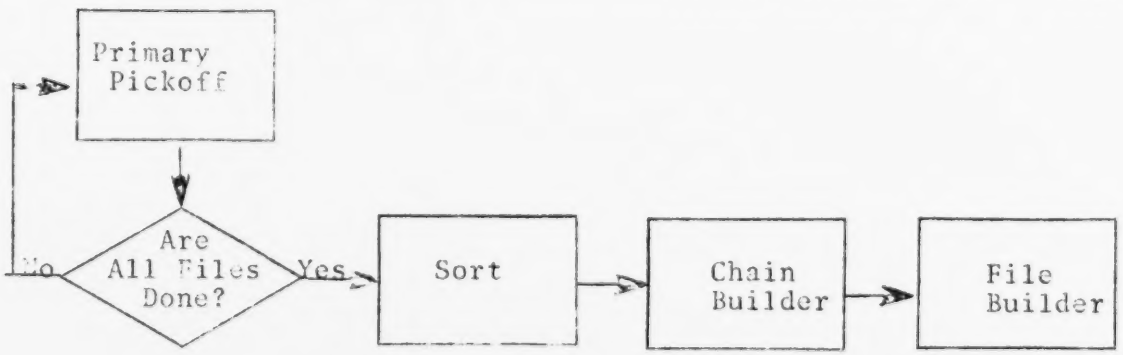
3. CHAIN BUILDER

This program condenses the sorted output to the required input for the build program. It produces a descriptor and/or identifier listing which can serve as a master when search requests are being formed. This routine rejects any keyword with less than three hits on the master tapes. This covers most of the errors which occurred when the ERIC master files were created. The output also contains a count of all keywords which were not rejected and their associated hits. These numbers can be used to determine the space requirements of the Master Index File and the Master Inverted File. Along with these counts, a count of rejected keywords and their associated hits are printed.

4. MASTER INDEX AND INVERTED FILE BUILDER

This program creates the files needed by the search program. The space formulas (described in the program write-up) are accurate to within one or two tracks of the actual file requirements. This program has the ability of creating a file layout listing, which is helpful in determining the space utilization of the program.

A detailed description of each of these programs can be found in the program descriptions section of the manual. The following flow chart is followed when initially creating the Master Files.



Initial program flow for file creation.

MASTER FILE MAINTENANCE

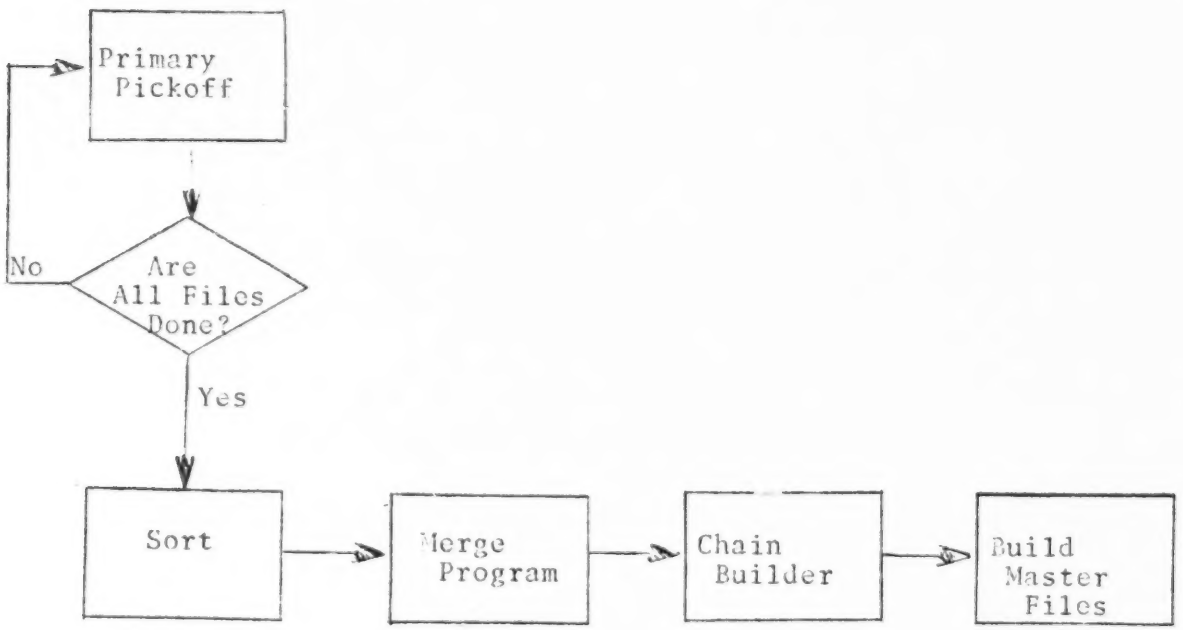
The Master File maintenance consists of adding the ERIC file updates to the Master File. Since updates are available every quarter, it is necessary to have some procedure by which these updates are incorporated into the Master Files. The procedure used is similar to that used in the initial file creation. An update program is used to purge old tape files from the master and merge the new tapes in.

There are two possible methods of adding the updates to the Master File. The first is to add the update as a new, unique file number. This method is the easiest and requires the least amount of work. All that is required is that the pick off program be run against the update with a new file number. Then, the output from this is sorted and merged into the master file. This output is then used by the chain builder to create the new master tape. As was stated, this is the easiest method, but the number of tapes used by the system increases rapidly.

The second method is to take the previous ERIC update and merge it with the appropriate file. For example, you have the CIJEMAST file on a 2400 foot tape volume, but only 1200 feet are used. When the second update for the CIJEMAST file is received, the first update could be merged with the 1200 foot volume. This means that the CIJEMAST tape needs to be picked off again, but the CIJEMAST files still only require two volumes. No matter which method is chosen, the following sequence of programs needs to be run.

1. Primary Pick Off
2. Sort
3. Merge
4. Chain Builder
5. Master Index and Inverted File Builder

The merge program has one input card, which tells it which files are to be purged from the Master. The merge program will replace the purged files with the new one to create a new master tape as input to the chain builder. The following flow chart is used for each method.



Adding an update to the Master files.

PROGRAM OPERATION AND PROGRAM FLOW

The SLIC package of programs has been set up to be as flexible as possible in processing the user's requests. It is not necessary to run the search program after every request edit---these programs can be run at any time. Each request is put into the SLICREQ file for processing at a later time. The maximum number of requests which the SLICREQ file can handle depends upon the size of the file.

The SEARCH program can run an unlimited number of searches, which have the SIMulate option. It is limited, however, on the number of searches it can handle with the RUN option. This limitation is imposed to provide an efficient program flow. The maximum number of searches the select program can handle is 250, so that limitation is placed on the search program.

Normally, a search request is first put through a SIMulate run, before an actual run is performed. This allows the operator to check the number of hits a search will have, and make any possible corrections to the request. Once the request has been run, the hits from that request are placed in the SLICOUT file. This file is set up to handle 250 searches. The requests need not come from the same run of the search program: the output in the SLICOUT file can be accumulated over a period of time until its maximum capacity has been reached. Once this happens, the first sort must be run. This sort is necessary to set up the hits for the select phase. Once the sort is run, the select program must be run before another sort uses that area of disk. If the select program is not run before the sort is run again, the output from the other sort is lost, and the searches must be rerun.

SLIC Time Accounting

The SLIC programs have a built in time accounting function. This provides the user with a method of accounting for all searches run in the system. This function is available only if the computer has a timer. The results of the time accounting system are as accurate as the DOS system can provide. The methods used in the SLIC routines for time accounting are described below.

The request edit program is considered part of the search program in the time accounting routine. The amount of time allocated to each search is obtained from clock stop time minus clock start time. This is the only method available due to the procedures used in the search routine.

The sort routine and the select routine use a different method of time allocation. The time for each search is dependent upon the following formula:

TS = (HPS/TH) * TT Where: TS = Time Per Search
HPS = Hits Per Search
TH = Total Hits Processed
TT = Total Time of Routine

It has been determined that the amount of time in the sort and the select routines is normally constant due to the amount of overhead in those routines. As an example, if one search is run, and it has ten hits, the select routine may require one hour to search the tapes for the hits. Since the total number of hits is ten, and the total amount of time is one hour, the whole hour will be allocated to that one search. Now, if ten searches are run and each search has ten hits, the select program will still require one

hour to search the tapes. According to the formula, the time for each search is one hour multiplied by the number of hits for the search divided by the total number of hits, or one tenth of an hour per search. This is a lot less time per search, and it results in a more efficient utilization of the computer. No programs have been provided to analyze the data obtained from the time accounting function because each installation has a different idea of what is important in an analysis. The simple program which is provided will give you an average time per search, average number of hits, average number of searches run per day, and totals for all variables. It is designed to be a model for any analysis programs the user may wish to write. The formats of all the time accounting records are given in detail in the record format section of the manual.

The Request Edit Program

OPTIONS:

The edit program has 2 options available through the use of the DOS UPSI switch.

UPSI SETTING	DESCRIPTION
// UPSI 1	Produce a decoded request table listing.
// UPSI X1	Use the 2311 disk option for output.

The decoded request table listing contains the length of the record put in the SLICREQ file, the search number, the time it took to decode the request, the ACCESS options chosen, the tape files chosen, and a list of each keyword, its type, and its logic function.

INPUT:

The input to this routine consists of the MAXHITS, FILES, ACCESS, and REQUEST cards. The input file is SYSIPT, which must be assigned to a card reader. Following is a description of each card type.

I. MAXHITS Card:

The MAXHITS card is used to specify the maximum number of hits a search can have. If this specification is exceeded, a warning message is printed, and the number of hits found and the number dropped are noted.

The card has the following format:
Card columns 1-8 contain the word 'MAXHITS='.
The equal sign may be followed by a number or the word ALL.
Either must be followed by a semi-colon.

Restrictions:

1. The maximum number of hits which can be specified is 32,767.
2. A specification of zero hits will be flagged as an error.
3. When the word ALL is used, a number of 32,767 is assumed.
4. There are no restrictions as to the number of MAXHITS cards which can appear in an edit.

Examples:

Suppose you are interested in only the last 15 hits from a search, the following MAXHITS card would be used:

MAXHITS=15;

Now, for the next search, you want to respecify the number of hits to be allowed. You can reset this specification by the following card:

MAXHITS=ALL;

USAGE:

The MAXHITS card can be used most effectively by allowing the user only those hits which will do him the most good. If his search had 2,000 hits, he would not be able to absorb all of the information in those hits. Some of the articles referred to could be out of date and useless. The MAXHITS card could be used to give him only 100 hits. These would be the last 100 hits found, which would be the most recent on the files.

Once a MAXHITS specification has been given, that number applies to all of the searches following in that edit until another MAXHITS card is used. This allows you to specify the maximum number of hits for all searches by only one card rather than using a card for each separate search.

II. FILES Card:

USAGE:

The FILES card is used to specify which tapes are to be searched. Since there are only 250 files allowed in the SLIC system, the range which can be specified is 1-250. This card allows the person responsible for the system to selectively choose which master tapes to be used.

CARD LAYOUT:

The word 'FILES=' must appear in card columns 1-6. The equal sign may be followed by a list of numbers separated by commas or the word ALL. Whichever method is used, it must be terminated by a semi-colon. If it is necessary to continue the card to a new card, the new card must have a C in column 1. Only numbers found before column 73 on a card are decoded, then a new card is expected.

RESTRICTIONS:

1. A file with the number 0 is not allowed.
2. There is no restriction as to the number of FILES cards which may appear in the edit run.
3. When the word ALL is specified, all available files are searched, which will result in the maximum number of hits for a search.

EXAMPLES:

Suppose your SLIC system has 5 tapes. Your user is interested in only the most recent update of the RESUMAST file. If this is tape number 5 on the system, the following card would be used:

```
1
FILES=5;
```

If your user wanted both the CIJEMAST and the RESUMAST updates, and these updates were files 4 and 5, the following card would be used:

```
1
FILES=4,5;
```

The next user is interested in all the possible hits he can get on his particular subject matter. The following card would instruct the SLIC search program to use all files:

```
1
FILES=ALL;
```

Now, suppose you have 230 files in your SLIC system, and your user wants only data from a specific time period. An example of such a card follows: (This example is used only to show how a continuation card may be used.)

```
1                                                                    72
FILES 1,2,3,5,7,11,20,100,101,102,110,115,120,125,130,140,160,180,
C181,182,190;
```

Notice that a C is punched in column 1 of the second card to denote a FILES card continuation.

III. ACCESS Card:

USAGE:

The ACCESS card is used to tell the search program what type of run it is. There are two types of runs, a simulated run, and an actual run. These will be explained in further detail later. The other option specified on the card is whether or not a listing of the accession numbers found in the search is desired. The option is only available if the Master Inverted file is built using accession numbers.

The word 'ACCESS=' must appear in card columns 1-7 of the card. The following combinations are allowed:

1.	ACCESS=OFF,SIM[1]	Accession numbers are not to be printed and it is a simulate run.
2.	ACCESS=ON,SIM[1]	A list of the accession numbers found is to be printed and it is a simulated run.
3.	ACCESS=OFF,RUN[1]	Accession numbers are not to be printed, and it is an actual run.
4.	ACCESS=ON,RUN[1]	A list of accession numbers found is to be printed and it is an actual run.

If the first operand is omitted, a comma must appear after the equal sign to designate an omitted operand. If the second operand is omitted, only the first one followed by a blank need appear.

This card can be used as a "quick" search card to allow the user to get the accession numbers for his hits. These he can use to reference microfiche, if it is available. The simulate option can be used to obtain an idea of how many hits a search will have without loading the output file. It allows for many runs of a specific request until the desired number of hits is obtained. It gives the operator an idea of how to restrict a request and yet provide the user with the most meaningful output. When the request is set up to the operator's satisfaction, a RUN specification will put the hits in the output file for the select program.

IV. REQUEST Cards

USAGE:

To input a request to the search program. The input request is limited to 40 keywords. These keywords cannot exceed 35 characters in length. Each keyword must have a type associated with it, and they must be separated by a logic function operator. The request is terminated by a semicolon following the last keyword type in the search. The keyword types are shown in table 1 with an explanation of each. Only the 5 types shown are allowed. Each request must be assigned a search number which is between 1 to 32,767. These search numbers are not checked for their uniqueness, therefore, it is the user's responsibility to ensure their uniqueness in order to distinguish the various searches.

CARD LAYOUT:

The following general layout is used for the search program.

NNNNN KEYWORD|TYPE|FUNCKEYWORD|TYPE|;

Where:

NNNNN - the search number, it must appear in card columns 1-5

- card column 6 is used for search continuation cards. If a search request needs to be continued from column 72 of the card, a C must be punched in this column on the continuation card. (The same search number must appear on the continuation card in card columns 1-5.)

KEYWORD

| - concatenation symbol used to designate the start of the keyword type field.

TYPE - type of keyword taken from Table 1

| - concatenation symbol used to designate the end of the type field.

FUNC - the logic operation to be performed on the keywords *

: - designates the end of the request

* Refer to the description of the logic functions.

More often than not, the search request will require two or more cards. There is no limit as to the number of cards a search can occupy, the only limit is that 40 keywords are allowed. Since the keyword lengths can vary from 1 to 35 characters, the number of cards needed will vary.

RESTRICTIONS:

1. Keywords may contain any valid characters except a concatenation symbol (|).
2. Keywords must contain 1 - 35 characters.
3. Each keyword must have a type associated with it.
4. All keywords must be separated by a functional operator.
5. Each request must end in a semicolon (;).

EXAMPLES:

Sunpose your user is interested in topics related to colleges and military influence within them. To set up this request for him, you should go to the thesaurus and find the correct descriptors to be used. After you have done this, your request could be:

```
1
00001 COLLEGE|T|+MILITARY|T|;
```

This may result in hits from descriptors which are not desired. If only descriptors starting with the word MILITARY are desired, the FIRSTWORD (F) type can be used. Now your request would read:

```
1
00001 COLLEGE|T|+MILITARY|F|;
```

This could give you the required hits but COLLEGE does not encompass all of higher educational school types. To expand on the request, include UNIVERSITY. The request is now:

```
1
00001 COLLEGE|T|/UNIVERSITY|W|+MILITARY|F|;
```

Still a further expansion of the request would be:

```
1
00001 COLLEGE|T|/UNIVERSITY|W|/HIGHER EDUCATION|F|+MILITARY|F|;
```

This request will probably give you the desired results. Now, the user had decided that he wants those articles but not the ones which refer to INSTRUCTORS or TEACHERS. The request now reads:

```
1
00001 COLLEGE|T|/UNIVERSITY|W|/HIGHER EDUCATION|F|+MILITARY|F|←,IN
                                                                72
00001CSTRUCTORS|W|/TEACHERS|W|;
```

This request has now been completed.

There are many combinations of keywords, types, and logic functions which can be used. Each request will require something a little different. The thesaurus of ERIC descriptors and the Master Descriptor List will be your most valuable aids in setting up your requests.

TABLE 1: Keyword Types

Mnemonic	Meaning	Usage
F	FIRSTWORD	The character grouping must appear at the beginning of the descriptor.
W	WORD	The character grouping must be preceded by a blank and followed by a blank or punctuation anywhere in the descriptor.
S	SUFFIX	The character grouping must be preceded by an alphabetic character and followed by a blank or punctuation anywhere in the descriptor.
P	PREFIX	The character grouping must be preceded by a blank and followed by an alphabetic character or a hyphen anywhere in the descriptor.
T	TEXT	The character grouping can be found anywhere in the descriptor. There is no qualifying characteristics to this type.

OUTPUT:

The output from the edit program goes to two devices.

1. Disk Output:

   This output consists of the decoded request with all of the options desired. It is used by the search program. This file must be preformated with binary zeros before the first time it is used.

2. Printed Output:

   There are three possible outputs to the printer. They are:

   A. A listing of the input cards.

   B. The decoded request table if desired.

   C. Any errors which are found in the input cards. These messages are listed in the message manual.

FILES:

The following three files are required by the edit program.

FILE NAME	DESCRIPTION
SLICREQ	The preformated disk file used to contain the decoded input requests, and their options.
SYSLST	The printer file to be used by the edit program. This file must be assigned.
SYSIPT	The card input file for the edit program.

COMPLETE SEARCH REQUEST EXAMPLE

The following job illustrates how a common SLIC search request edit would be set up. Each statement is explained after the listing. All cards are punched starting in card column 1.

```
 1  // JOB SLICREQ REQUEST EDIT PROGRAM
 2  // EXEC SLICRQ01
 3  FILES=1,3,4;
 4  MAXHITS=ALL;
 5  ACCESS=ON,SIM
 6  00011 ACADEMIC|F|+DROP|P|+-,WORK|F|;
 7  00094 MIDDLE CLASS VALUES|F|/CULTURE CONFLICT|F|+URBAN EDUCATION
 8  00094C|F|;
 9  00102 SEXUALITY|F|/SEX|F|/SEX DIF|F|+CHILD PS|F|/CHILD ROLE|F|/
10  00102CCHILD DEVE|F|/CHILDHOOD A|F|/CHILDHOOD|F|/CHILDREN|F|/PRE
11  00102CSCHOOL CHILDREN|F|;
12  00105 DISADVANTAGED YOUTH|F|+VALUES|F|/MORAL VALUES|F|/ETHICAL
13  00105CVALUES|F|/PERSONAL VALUES|F|;
14  00106 TRUANCY|F|;
15  /*
16  /&
```

Statement #	Description
1	Required DOS job card to designate start of job.
2	Required DOS control card to tell the supervisor which program to get.
3	This user wants only files 1, 3, and 4 searched.
4	This user wants all of the hits found on those files.
5	The user wants a listing of the accession numbers found, and it is a simulated run.
6-14	The input requests. Notice the combinations of functions keywords, and types used in all searches. Also, notice that searches 00094, 00102 and 00105 were continued after the request went thru card column 72 of the first card.
15	This delimiter is used to indicate the end of the input to the edit program.
16	This card tells the DOS system that it is the end of the job.

If the output from the simulate run is satisfactory, card number 5 can be changed to 'ACCESS=ON,RUN' or 'ACCESS=OFF, RUN' to load the output file for the sort, select, and print phases of the SLIC system.

DETAIL DATA	COUNT	REC. ID	REC. ID
**********	******	********	********
AMERICAN INDIANS	1258		
AMERICAN LITERATURE	214		
AMETROPIA	REJECT	EJ005752	ED015863
AMHARIC	14		
AMISH	8		
AMPUTEES	11		
ANALOG COMPUTERS	22		
ANALYSIS OF COVARIANCE	42		
ANALYSIS OF VARIANCE	642		
ANALYTIC GEOMETRY	32		
ANALYTICAL CRITICISM	344		
ANATOMY	42		
ANCIENT HISTORY	74		
ANCILLARY SERVICES	129		
ANESTHESIOLOGY	7		
ANGLO AMERICANS	186		
ANIMAL BEHAVIOR	40		
ANIMAL CARETAKERS	4		
ANIMAL FACILITIES	16		
ANIMAL SCIENCE	75		
ANIMATION	23		
ANISEIKONIA	REJECT	ED015863	
ANNOTATED BIBLIOGRAPHIES	1604		
ANNUAL REPORTS	335		
ANOMALIES	39		
ANSWER KEYS	40		
ANTHOLOGIES	105		
ANTHROPOLOGY	238		
ANTI INTELLECTUALISM	17		
ANTI SEGREGATION PROGRAMS	REJECT	EJ044795	ED042855
ANTI SEMITISM	11		
ANTI SOCIAL BEHAVIOR	51		
ANTISEMITISM	REJECT	ED028221	
ANTISOCIAL BEHAVIOR	8		
ANTITHESIS	5		
ANXIETY	589		
APACHE	REJECT	ED025757	ED046508
APHASIA	87		
APPLIANCE REPAIRING	REJECT	ED013421	ED055204
APPLIANCE SERVICE TECHNICIANS	REJECT	ED012579	
APPLIED LINGUISTICS	356		
APPLIED MUSIC	24		
APPLIED READING	6		
APPRENTICESHIPS	155		
APTITUDE	137		
APTITUDE TESTS	392		
ARABIC	109		
ARABS	10		
ARBITRATION	52		
ARCHAEOLOGY	48		
ARCHITECTS	79		
ARCHITECTURAL BARRIERS	8		

```
ACCESS=ON,SIM
FILES=2;
01026 SCHOOL ATTE|F|/ATTENDANCE|W'+LEGAL|F|;

01027 SCHOOL ATTE|F|;

FILES=ALL;
01028 GAMES|F|/GAME T|F|/MANAGEMEN' G|F|/EDUCA'IONAL GA|F|/CLASSROOM GA|
01028(F|/SIMULATI|F|+SOCIAL STU|F|/HUMAN REL|F /COMMUNICATIONS|W|/SOCIAL
01028( SCI|F|;

01029 FEAR|F|;

FILES=1,4,6;
01030 DIFFERENTIATED|F|;

FILES=ALL;
01031 /FRICAN A|F|+HIGH SCHOOL|F|/SECONDARY|F|;

01032 NEGRO LI|F|+HIGH SCHOOL|F|/SECONDARY|F|;

01033 FAMILY INF|F|/FAMILY E|F|/FAMILY LS|F|+CULTURAL D:S|F|;

01034 STUDENT PA|F|+CURRICULUM DEV|F|/CURRICULUM PL|F|;

01035 ADMINISTRATOR A|F|+STUDENTS|L|;

     ** D010 INVALID KEYWORD TYPE. SEARCH BYPASSED

01036 ADMINISTRATIVE PO|F|/ADMINISTRATIVE PR|F|+STUDENTS|'|;

01037 ADMINISTRATIVE PE|F|/DEPARTMENT D|F|/DEPARTMENTS|F|/ENGLISH D|F|+H
01037CIGH SCHOOL|F|/SECONDARY|F|

     ** D013 INVALID OPERATION ENCOUNTERED. SEARCH BYPASSED

01038 PERCEPTUAL M|F|+PHYSICAL E|F|;
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* * * SEARCH 01029

ACCESSION NUMBER PRINTOUT

EJ000269	EJ000271	EJ001421	EJ001444	EJ003079	EJ003233	EJ003251	EJ003966
EJ003970	EJ003996	EJ004826	EJ004882	EJ005146	EJ005186	EJ005973	EJ006308
EJ006484	EJ006487	EJ006497	EJ006506	EJ006508	EJ008110	EJ008290	EJ008292
EJ009854	EJ009948	EJ012620	EJ013320	EJ014124	EJ015099	EJ015860	EJ018988
EJ020718	EJ022958	EJ023409	EJ023732	EJ025173	EJ025321	EJ027373	EJ029090
EJ033093	EJ035625	EJ035998	EJ037705	EJ040267	EJ042126	EJ043671	EJ045049
EJ045389	EJ045447	EJ046961	EJ047713	EJ047886	EJ048550	EJ049415	EJ049419
EJ049437	EJ049460	ED001962	ED011593	ED013542	ED014804	ED016161	ED020269
ED026137	ED026141	ED026749	ED029712	ED033503	ED034362	ED039936	ED040352
ED046540	ED055653	ED059504	ED060054	EJ051006	EJ051651	EJ052384	EJ052385
EJ052388	EJ052560						

TAPE TABLE

TAPE	COUNT
1	58
2	10
3	5
4	1
5	2
6	6

SEARCH 01029 HAS 82 HITS

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CLEARING HOUSE ACCESSION NUMBER. PS004932

PUBLICATION DATE. 70

TITLE. COGNITIVE DEVELOPMENT OF YOUNG CHILDREN IN RESIDENTIAL CARE. A STUDY OF CHILDREN AGED 24-MONTHS.

PERSONAL AUTHOR. TIZARD, BARBARA, JOSEPH, ANNE

INSTITUTION CODE. HHL43010

DESCRIPTORS. *COGNITIVE DEVELOPMENT, *FEAR, INSTITUTIONAL ENVIRONMENT, *PRESCHOOL CHILDREN, *RESIDENTIAL CARE, *RETARDATION, SOCIAL DEVELOPMENT, VERBAL ABILITY

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ABSTRACT. THE COGNITIVE DEVELOPMENT OF 30 24-MONTH-OLD CHILDREN WHO HAD ENTERED RESIDENTIAL CARE BEFORE THE AGE OF FOUR MONTHS WAS COMPARED WITH THAT OF 30 WORKING CLASS CHILDREN MATCHED FOR AGE AND SEX WHO WERE LIVING AT HOME IN LONDON. BEFORE TESTING, THE CHILDREN S FEAR OF STRANGERS WAS RATED IN A STANDARDIZED SITUATION. THE MEAN MENTAL AGE OF THE RESIDENTIAL NURSERY CHILDREN WAS 22 MONTHS. ALSO IN A PLAY SITUATION., THESE CHILDREN VOCALIZED LESS THAN THE HOME CHILDREN. THE INFERIOR PERFORMANCE OF THE RESIDENTIAL CHILDREN IS DISCUSSED IN TERMS OF THEIR NURSERY ENVIRONMENT, THEIR GENETIC POTENTIAL AND THEIR LIMITED EXPERIENCE WITH STRANGERS. (AUTHOR/WY)

INSTITUTION NAME. LONDON UNIV. (ENGLAND). INST. OF EDUCATION.